

REVOLVING CREDIT SYSTEMS  
PRIOR TO THE TRUTH IN LENDING ACT

by

Marilyn Janet Morris Max  
B. S., Iowa State University, 1967

---

A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Family Economics

KANSAS STATE UNIVERSITY  
Manhattan, Kansas  
1969

Approved by:



---

Major Professor

LD  
2668  
74  
1969  
m38

## TABLE OF CONTENTS

INTRODUCTION . . . . .	1
Types of Credit. . . . .	1
Historical Development of the Truth in Lending Act . . . . .	3
Controversy Caused by Revolving Credit . . . . .	8
Previous Studies . . . . .	11
Objectives . . . . .	14
PROCEDURE . . . . .	15
Preliminary Study . . . . .	16
Collection of Data . . . . .	17
RESULTS . . . . .	21
Dollar Costs . . . . .	22
Systems Used . . . . .	25
DISCUSSION . . . . .	31
Reliability of Central Credit Office Figures . . . . .	31
Confidence of Creditors Compared with Accuracy of Figures. . . . .	33
CONCLUSIONS . . . . .	35
RECOMMENDATIONS . . . . .	36
ACKNOWLEDGMENTS . . . . .	37
LITERATURE CITED . . . . .	38
APPENDIX . . . . .	41

## INTRODUCTION

Credit has become an important and widely-used tool of the consumer. Consumer credit has grown immensely during the 20th Century. At the end of World War II in 1945, only \$5 billion was outstanding in consumer credit, but by 1968 the volume had surged to over \$100 billion (Board of Governors, 1968). The volume of consumer credit was so large that by 1967 the estimated \$13 billion consumers paid in finance charges nearly equaled the \$14 billion paid by the nation in interest for the national debt (Barr, 1967).

### Types of Credit

Credit terms are described here as they were generally understood in 1967 when this study was initiated. This was prior to the passage on May 29, 1968, of the Truth in Lending Act, which standardized credit terminology. The pertinent definitions from the Act will be presented later.

#### Closed-end credit

"Closed-end" or "contract" credit is a type of credit in which the contract specifies at the time the credit is granted all the relevant terms: the time and amount of payments, the amount of credit, and the rate. If the rate is not disclosed, it can be determined from the other three factors. Under this form, the contract is determinant. That is, given any three of the four terms of the formula  $I = PRT$  (interest = principal  $\times$  rate  $\times$  time), the fourth can be determined.

#### Open-end credit

"Open-end" or "revolving" credit is a type of credit in which neither the borrower nor the creditor usually knows the exact time of charges and payments or the exact amount of charges and payments. When the agreement is made, the consumer is extended a "line of credit" so that he can obtain

more credit as payments are made, with a service charge assessed on the amount being revolved (Morse, 1967a). There may or may not be other terms disclosed, such as repayment terms, the rate, the balance to which the rate is applied to compute the service charge, and minimum monthly charges.

The volume of closed-end credit greatly exceeds that of revolving credit. It has been difficult to obtain a measure of the exact growth of revolving credit. Although the Federal Reserve Board publishes monthly reports on the size of consumer credit, no separate figures for revolving credit have been collected and published routinely.

Prior to 1968, estimated amounts for revolving (open-end) credit were included under "charge accounts" within the "non-instalment credit" classification in the Federal Reserve Bulletin (Board of Governors, 1968). Although no one knew the exact amount of revolving credit, Barr (1967) estimated that about half the amount in charge accounts in department stores was involved in revolving credit. A recent study for the National Retail Merchant's Association reports revolving credit to have increased from 35 per cent to 58 per cent of net credit sales (Kansas City Star, 1969).

A major revision of consumer credit estimates from June 1960 through 1968 was issued December 1968 (Board of Governors, 1968). The revision separated revolving credit from "charge accounts" and classified it as "instalment credit." One reason for the revision was the introduction and active promotion of revolving consumer credit plans by businesses such as banks and gasoline marketers. In addition, department stores had begun allowing customers to charge the cost of appliances to their revolving credit accounts. These changes affected classifications within both instalment and non-instalment credit categories. The revision was made under the assumption that revolving credit accounts generally are instalment credit.

Since revolving credit had previously been included with "charge account" figures within the "non-instalment" category, the revision increased the estimate and amount of consumer instalment credit outstanding at the end of 1967 by eight per cent and decreased by eight per cent the estimate of non-instalment credit. The revision meant little change in amount of consumer instalment credit outstanding before 1963 because revolving credit began its rapid expansion during the years 1963-1965.

The Federal Consumer Credit Protection Act defines open-end credit, but does not define closed-end credit. Open-end credit is defined in Section 103 as:

. . . a plan prescribing the terms of credit transactions which may be made thereunder from time to time and under the terms of which a finance charge may be computed on the outstanding unpaid balance from time to time thereunder. (Pub. L. 90-321)

Closed-end credit became the undefined portion of all consumer credit, as either "Sales not under open-end credit plans" (Sec. 128), or "Consumer loans not under open-end credit plans" (Sec. 129).

#### Historical Development of the Truth in Lending Act

As the volume of consumer credit soared after World War II, concerned Americans began to question whether the consumer had an adequate understanding of the cost of buying on credit. They questioned whether consumers were being provided with the information needed to shop for credit and to use credit wisely (Morse, 1957). There developed a demand that essential facts be provided the consumer.

A resolution favoring legislation to require the disclosure of the dollar cost and annual rate for consumer credit was passed by the Kansas Home Economics Association in September of 1959. In January 1960, Senator

Douglas introduced the "Consumer Credit Labeling Bill," S. 2755, which would require disclosure of both the dollar cost and the annual rate for consumer credit. One weakness of this bill was its failure to distinguish revolving credit from closed-end credit. Opponents also criticized it for requiring disclosure of the "simple annual interest" rate, for this would require the disclosure of a rate which often exceeded the usury rate legislation of states limiting the rate of interest (Morse, 1967b).

#### Evolution of Truth in Lending bills

One of the central issues of debate concerned the wording of the rate. The original bill, S. 2755, used the expression "simple annual interest." It was modified during the hearings to "simple annual rate" (Committee Print of S. 2755, May 3, 1960). This slight change did not serve to allay the previous fear of interest exceeding state usury laws, nor did it recognize the problem inherent in revolving credit of not being able to disclose the finance charge at the time credit is extended. The bill was reintroduced as S. 1740, Truth in Lending, in the 87th Congress on April 27, 1961. Revolving credit, however, was not given separate treatment until the Committee Print of S. 1740 on April 21, 1962. The wording of the Committee Print of S. 1740 was retained in S. 750 introduced January 15, 1963, in the 88th Congress. It provided for disclosure of " . . . the simple annual percentage rate or rates providing a yield equal to the finance charge imposed." The word "yield" created much concern, because the yield issuing from a credit plan relates directly to how much and when the credit is used. It would require calculation of a yield rate for each account at the close of each month. The distinction between yield rate and nominal rate will be discussed in the next section.

The problem created by the use of the word "yield" was alleviated in

the wording of S. 2275 introduced July 12, 1965, in the second session of the 89th Congress. Senate bill S. 2275 required disclosure of the annual percentage rate imposed on the monthly balances to obtain the finance charge. No Congressional hearings were held on S. 2275, so it was not until the 90th Congress when, on January 11, 1967, Senator Proxmire introduced S. 5 that a workable requirement for a rate disclosure for open-end credit was subject to Congressional hearings. This form of rate disclosure recognized the period of payment as the basic time unit, and the periodic rate as that which when imposed on a declared outstanding unpaid balance would produce the finance charge. The annual rate was the product obtained by multiplying the periodic rate by the number of such periods in a year. This rate concept was first introduced by the Consumer Advisory Council (1963) in its report submitted to President Kennedy, October 1963.

Simple nominal annual percentage rate

The most significant contribution of the Consumer Advisory Council toward clarification of rate terminology was in its introduction of the nominal annual percentage rate. For contract credit it recommended that the simple annual nominal percentage rate be quoted so as to be directly comparable with the rates used by banks, savings and loan institutions, credit unions, and postal savings to disclose earnings on money saved. For revolving credit accounts, it recommended setting forth the simple annual nominal percentage rate in any agreement prior to extending credit and also stating it clearly in writing at the end of each month. The Consumer Advisory Council (1963) stated, "The simple nominal annual percentage rate . . . shall be the periodic rate multiplied by the number of periods in one year."

Thus, the Consumer Advisory Council introduced two new concepts:

- (1) The periodic rate, and its expression as an annual percentage rate.
- (2) The nominal rate, which distinguished the rate that was applied periodically from the rate that the credit agreement yielded; that is, the "periodic" from the "yield" rate.

The use of the word "nominal" prompted Bradford, the minority clerk of the Senate Banking and Currency Committee, to request clarification. The exchange of letters appears in the hearings on S. 750 (1963-1964), but the essence can be summarized in the following sentence: "The nominal rate is the rate which would be realized if the interest received at the end of each conversion interval were not productively invested until the end of the year, while the effective rate is the total return on the unit principal for one year." (The "effective" and "yield" rate are synonymous.)

The first official recognition and application of the term "nominal annual percentage rate" is to be found in the Department of Defense Directive number 1344.7 issued May 1966. The essence of the Directive was that the Department of Defense would assist private creditors in collecting on debts of military personnel only if the creditor had advised the military personnel the cost of credit and the nominal annual percentage rate, and had included this information in the contract. Approximate annual rate tables on contract credit were prepared by the U. S. Treasury. The tables show annual rates ranging from five per cent to thirty-six per cent for credit or loans repaid in sixty or fewer regular payments. Open-end credit was covered under Section 10E of the Directive which stated that military assistance would be provided creditors only if the creditors disclosed the periodic rate, its annual rate equivalent, and the balance to which it is applied to compute the charge (Department of Defense, 1966).



## U. S. Rule

The Directive showed for the first time the feasibility of using the U. S. Rule (Neifeld, 1953) set forth by the United States Supreme Court in 1939 in Story v. Livingston:

The correct rule in general is that the creditor shall calculate interest whenever a payment is made. To this interest the payment is first to be applied; and if it exceed the interest due, the balance is to be applied to diminish the principal. If the payment fall short of the interest, the balance of interest is not to be added to the principal so as to produce interest. The rule is equally applicable, whether the debt be one which expressly draws interest, or one which interest is given in the name of damages. (Mr. Justice Wayne, 38 U. S. 359 @ 371, 10 L. Ed. 200 @ 206)

In the table developed by the Department of Defense, regular monthly payments were assumed. The actuarial or annuity method was used for the construction of these tables, as they conform to the U. S. Rule when payments are regular.

The annual percentage rate terminology was incorporated in S. 5 introduced January 11, 1967, by Senator Proxmire. The bill emerged from Congress on May 29, 1968, as the Consumer Credit Protection Act. Section 107 required the disclosure of the annual percentage rate. It states that for contract type of credit, the rate shall be the " . . . nominal annual percentage rate . . . calculated according to the actuarial method of allocating payments." And for open-end credit, the annual percentage rate shall be " . . . the quotient (expressed as a percentage) of the total finance charge for the period to which it relates divided by the amount upon which the finance charge for that period is based, multiplied by the number of such periods in a year." Thus the recommendations made by the Consumer Advisory Council in 1963 not only proved workable under the Department of Defense Directive, but also prevailed in the final passage of Truth in Lending.

### Controversy Caused by Revolving Credit

Revolving credit was the major cause of division among Congressmen. Even though there were over a thousand pages of Truth in Lending hearings before the Subcommittee on Financial Institutions of the Senate Committee on Banking and Currency, the full committee decided that it needed to hold a set of special hearings specifically on the revolving credit provisions of the Truth in Lending bill before recommending S. 5 to the Senate. The Committee met June 23, 1967, and recommended passage of S. 5 with disclosure of a periodic (not annual) rate on revolving credit. With this compromise, S. 5 was passed by the Senate on July 11, 1967, with a record 80-0 vote. In the House, after extensive hearings before the Subcommittee on Consumer Affairs, the Subcommittee failed to agree on the revolving credit issue, and passed it on to the full House Committee on Banking and Currency. It met in executive sessions for four days, and reported to the Committee of the Whole House on the State of the Union on December 13, 1967, a bill which was unsatisfactory in its revolving credit provisions. The bill was fully debated in the House of Representatives, where Congressmen Patman and Sullivan succeeded in strengthening it by restoring the requirement to disclose the annual percentage rate for revolving credit. This action to require annual percentage rate disclosure was sustained by the Conference Committee, composed of members selected by the House and Senate to reconcile differences in the bills as passed by the respective branches of Congress. Then both the Senate and the House passed the bill, and it was written into law.

The major factors involved in the controversy over revolving credit as summarized by the writer after reading the hearings were:

- (1) The unwillingness of retailers to disclose that they were charging 18 per cent.
- (2) A defensive argument of retailers that revolving credit was not profitable at such rates.
- (3) The impossibility, inaccuracy, or unreliability of disclosing an annual rate when charges actually were made monthly.

One example of the character of the controversy concerns the revolving credit account methods or systems which are basic to this thesis. The American Retail Federation (ARF) misused a table from a published pamphlet under copyright by Morse (1966, pp. 26-27). The table showed that 6 different revolving credit account methods, each with a uniform rate of  $1\frac{1}{2}$  per cent a month or 18 per cent a year, resulted in different costs. (Appendix A) The table was reprinted with the caption changed from "Revolving Credit Account Methods-- $1\frac{1}{2}\%$  per month (18% per year) applied to a standardized six-month account" to "Six Methods Used To Compute  $1\frac{1}{2}$ -Percent Monthly Service Charges on Revolving Credit Accounts (Standardized 6-Month Account)." This came to public attention in a letter written by the ARF to Congresswoman Sullivan to show the variety of systems used to compute the  $1\frac{1}{2}$  per cent monthly service charge. In hearings before the House Subcommittee on Consumer Affairs, Sullivan confronted Morse with the letter and table, and said, ". . . the American Retail Federation has been using your data on revolving credit charges in an effort to prove to us that it is impossible to figure the annual percentage rate on such charges." (Sullivan, 1967) The ARF queried, "How can the customer who pays \$5.44 and the customer who pays \$2.28 both be paying 18 per cent?" Morse replied that they were all paying 18 per cent, as the caption on the table originally said, on the credit for which they were being charged. The text of the ARF's letter and their changing of the caption reflect their inability to distinguish a

nominal rate from a yield rate, their unwillingness to multiply 12 times  $1\frac{1}{2}$  per cent and get 18 per cent, or their willingness to alter copyrighted material to suit their purposes.

A critical development in the support of annual rate disclosure for revolving credit accounts was the loss of the leading witness for the retailers. In 1964, when Senator Douglas held public hearings in Boston on the Truth in Lending bill, the Boston Retail Trade Board hired Dr. Vancil (1964) of Harvard Business School as a technical witness to evaluate the feasibility of the Douglas bill requirement to disclose the yield for revolving charge accounts. Vancil effectively demonstrated the impossibility of calculating the effective interest rate on revolving credit accounts prior to any billing cycle. In 1967, when S. 5 provided for disclosure of revolving credit as a nominal percentage rate, Vancil said that he would endorse the revolving charge account provisions of S. 5. In his judgment, the change in wording from "simple annual rate" to "nominal percentage rate" made S. 5 workable. (Further discussion of this issue appears in correspondence submitted to Sullivan by Morse, 1967c.)

Another crucial development, which divided the opposition and strengthened the position of those favoring annual percentage rate disclosure for revolving credit accounts, was the adoption by Montgomery Ward of the practice of adding charges for credit life insurance coverage onto customers' revolving credit accounts (U. S. Congress, Congressional Record, 1968). This obnoxious, if not illegal, practice brought national visibility to this questionable practice of retailers, and their united front collapsed. Representatives Sullivan and Patman gained support in the amendment to require annual rate disclosure.

After eight years of debate and discussion, the Consumer Credit Protection Act became Public Law 90-321 on May 29, 1968, with an effective date of July 1, 1969. Title I of the Act may be cited as the Truth in Lending Act.

#### Previous Studies

Studies of the accuracy of credit costs and rate quotations were initiated with contract credit. The technique of developing a model problem to use for surveying various creditors was first devised for contract credit. The same technique was utilized in the development of a problem for use in learning from creditors about their revolving credit systems.

#### Contract credit

The original studies to determine the accuracy of contract credit cost and rate quotations were undertaken beginning in 1959 by students enrolled in the course "Family Finance" at Kansas State University. They were given the problem of financing a used car with the amount and time of payments standardized. They were to contact a bank, a used car dealer, a consumer finance company, and a credit union, and from each ascertain the basic terms of dollar cost, dollar monthly payments, and annual percentage rate (Redeker, 1964). The results of one year (1962) were summarized and reported by Morse and Courter (1963). Only 17 per cent of the used car dealers, 26 per cent of the banks, 52 per cent of the consumer finance companies, and 72 per cent of the credit unions quoted a percentage rate within an accuracy range of plus or minus six percentage points. Since the students had been studying credit, they were expected to have a better understanding of credit than many consumers. Yet too often they were unable to recognize those quotations which were correct within six percentage points and those which were in

greater error: only 50 per cent identified the accuracy of used car dealers' quotations, 38 per cent the accuracy of bank quotations, and 69 per cent the accuracy of consumer finance companies and credit unions. The study by Morse and Courter was widely accepted by creditors' publications, appearing in Personal Finance Law Quarterly Report, Consumer Finance News, and Credit Union Executive. Also, it was summarized in the widely-used text Personal Finance by Cohen and Hanson (1964).

Redeker (1964) used similar data collected by students over a period of five years and confirmed the legitimacy of generalizing about the tendency of creditors to understate the rate of charge by approximately half.

#### Revolving credit

At the suggestion of Mrs. McNaughton of the headquarter staff of the American Home Economics Association, Morse began developing a similar problem format suitable for use in the study of revolving credit costs and rates. Unlike the contract problem, the revolving credit problem needed to be designed to reveal and reflect the different methods of assessing costs used by various creditors. To test its general usefulness and to detect new variations in accounting methods of creditors, it was tried out with various groups. The State Consumer Interest Committee chairmen of the American Home Economics Association assisted by taking the problem to retailers in their states. Credit union managers from southeastern United States were asked to complete the problem in their home cities as preliminary homework before attending a regional credit union workshop in Wichita, Kansas. Examples of the information obtained from these general surveys were selected to show the variety of methods then in current use to calculate charges. These were collected in an informal survey which was published in Truth in Lending (Morse, 1966, p. 24.)

In preparation for the article "What It Costs To Say Charge It," published in Changing Times (June, 1965), the editor consulted with Morse for data and information about revolving credit practices. He supplied examples of the variety of revolving credit systems in use. From this and other information, the editors developed three different methods for calculating revolving credit charges. Morse then enlarged these three methods to six possible methods (Appendix A). Costs ranged from \$2.28 to \$5.44 despite the uniform rate of  $1\frac{1}{2}$  per cent per month.

The variations in systems and costs developed by Morse were featured in Consumer Reports (1967) in a timely article on Truth in Lending, "The Big Hole in Truth-in-Lending." And, as cited earlier, the American Retail Federation used this material in a false and deceptive manner.

In preparation of materials for the National Consumer Credit Workshop sponsored by the American Home Economics Association in October 1967, Morse modified the revolving credit sequence by adding a final month to close out the account. The systems, previously defined by formula, were described in words and insertion was made of days within which to pay to avoid credit charges. The modified forms appear as "A Workbook on Consumer Credit" published in the Journal of Home Economics (January, 1968) and in the Conference Proceedings (Morse, 1967). (See also, page 19.)

During the fall semester of 1967, Kansas State University students enrolled in the course "Consumers and the Market" were asked, as a learning experience, to try out the revolving credit problem as it had been developed for the National Consumer Credit Workshop. Each student was to have hometown creditors in two different stores assist in working the problem. The data revealed a surprising variation between store outlets of the same chain. For the first time, the question asked was, "Are stores within the same chain,

which supposedly use the same method throughout the chain, capable of giving consistent responses?"

No study is known to have been made of the accuracy of revolving credit terms as measured by the consistency between credit personnel of the same stores granting revolving credit, and consistency between retail store outlets and central management. Because revolving credit is increasing rapidly and systems which may not be well defined or understood are being developed, this study was proposed to analyze revolving credit systems and creditors' understanding of their own systems.

#### Objectives

The objective of this study was to investigate prior to the Truth in Lending Act the reliability of revolving credit information obtainable from retailers.

Specifically, the objectives were to observe:

1. the consistency among retail store credit personnel of the same chain,
2. the consistency between retail store credit personnel and central credit office personnel of the same chain, and
3. the consistency between a conscientious consumer's interpretation of the stores' printed literature and information obtained from credit personnel and management

with regard to identification of credit systems used and the resultant dollar cost obtained from applying the system to a standardized billing sequence.



## PROCEDURE

A list of chain stores in Kansas likely to offer revolving credit was compiled from stores previously interviewed in the student survey during the fall semester of 1967 and from department store and variety store listings in the telephone directories shelved in Farrell Library at Kansas State University. Telephone calls were made to credit departments of chain stores in Kansas to determine if each chain actually did have a centralized revolving credit system, and if at least three outlets of that chain were located in Kansas. The following eleven chains met the criteria:

1. National Bellas Hess, Inc.
2. W. T. Grant Company
3. The Jones Store Company
4. Katz-Crank Drug Company
5. S. S. Kresge Company
6. Macy's
7. J. C. Penney Company, Inc.
8. Sears, Roebuck and Company
9. Gamble-Skogmo, Inc.
10. Montgomery Ward and Company, Inc.
11. Western Auto Supply Company

A minimum of 3 outlet stores for each of the chain stores was selected. For chains with more than 30 outlets in Kansas, at least 6 stores were selected.

Outlets selected for study were chosen from cities meeting the following criteria:

1. Population of 5,000 or more.
2. Located within a 150-mile radius of Manhattan, Kansas.
3. Contained outlets of at least 2 of the chain stores selected for study.

The cities were divided into population groupings according to economic areas defined by the U. S. Census of Manufacturers (U. S. Department of Commerce, 1963).

The sizes are as follows:

Small-size cities	5,000-24,999
Medium-size cities	25,000-49,999
Large-size cities	50,000 and over

A list of Kansas cities having outlets was obtained from a store manager of each chain. An itinerary was planned to include cities from each population group. There was variation in the number of cities selected from each population group because some stores were located in cities of only one size.

Most of the interviewing was done during August and September of 1968. No appointments were made prior to the first visit. In only two cases were creditors unavailable or too busy for interviewing at the time of the first visit. However, they met appointments for interviews at a later time. After all essential interviews were conducted in a city being visited, additional interviews were obtained as time permitted, and these were included in the final results.

#### Preliminary Study

A preliminary study was made to develop techniques for use in the study and to test the likelihood of meeting the objectives. Seventeen retail outlets both within Kansas and out-of-state were included in the preliminary study. There was no conflict in the information obtained from the preliminary and the final study.

Certain techniques and procedures were developed during the preliminary study. For example, the time of interviewing was found to influence the cooperation of credit personnel. Creditors generally were found to be busier on Saturdays than on week days, so all interviewing for the final study was done during week days. The procedure for asking questions was standardized,

and the format of the six-month billing cycle problem was revised. The researcher found that creditors were more cooperative in calculating credit costs when the problem was presented in the format of a 7-page booklet with one 2½-inch by 8½-inch billing statement on each page. The original format, shown on page 18, included all 7 billing statements on one sheet.

#### Collection of Data

##### Store interview

The interview consisted of three phases: First, creditors were asked for samples of written information concerning revolving credit that they routinely supply their customers. Second, creditors were asked to apply their stores' revolving credit account systems to the six-month sequence of billing statements in booklet form. In the third phase, creditors were shown descriptions of different revolving credit systems with variations using the form shown on page 19. The procedure followed was for the researcher to select the description which seemed to describe best the one the creditor had used to calculate the service charge. The creditor was then asked if that system described the system used by his chain store. If it did not, he was asked to select another description or to adjust the description until it described accurately the one used.

##### Regional office correspondence

Creditors were asked also for the address of the central credit office. After the interviews were completed, a letter asking for assistance in working the revolving credit sequence example was written to each central office. A sample letter is on page 20. If central offices sent incomplete replies or failed to reply to the first letter, follow-up letters were sent. Follow-up letters included a revolving credit sequence example worked by the

## REVOLVING CREDIT SEQUENCE\*

1. Post the service charge and complete the balances (filling in each space preceded by \$.)
2. Circle the balance used in figuring the service charges each month.

Dates	Opening balance	Payments	Returns	Purchases	Unpaid balance	Service charges @ ____ %	Closing balance
Jan. 4	\$ 0.00	.....	.....	\$ 10.00	\$10.00		
7		.....	.....	20.00	30.00		
9		.....	\$10.00	.....	20.00		
Statement			\$10.00	30.00		\$	\$
Jan. 10	\$ _____	.....	.....	.....			
12		.....	.....	80.00	\$		
Feb. 1		.....	.....	40.00	\$		
3		\$20.00	.....	.....	\$		
9		.....	30.00	.....	\$		
Statement		20.00	30.00	120.00		\$	\$
Feb. 10	\$ _____	.....	.....	.....			
12		60.00	.....	.....	\$		
14		.....	.....	40.00	\$		
16		.....	40.00	.....	\$		
Mar. 2		20.00	.....	.....	\$		
9		.....	.....	50.00	\$		
Statement		80.00	40.00	90.00		\$	\$
Mar. 10	\$ _____	.....	.....	.....			
14		10.00	.....	.....	\$		
18		.....	.....	10.00	\$		
Statement		10.00		10.00		\$	\$
Apr. 10	\$ _____	.....	.....	.....			
14		10.00	.....	.....	\$		
18		.....	.....	10.00	\$		
Statement		10.00		10.00		\$	\$
May 10	\$ _____	.....	.....	.....			
14		10.00	.....	.....	\$		
18		.....	.....	10.00	\$		
Statement		10.00		10.00		\$	\$
June 10	\$ _____	60.00+					\$ 0.00
TOTAL		\$190.00 + S.C.	\$80.00	\$270.00			

Creditor \_\_\_\_\_

Charges figured by: \_\_\_\_\_

Address \_\_\_\_\_

Position: \_\_\_\_\_

Type of business: \_\_\_\_\_

Date \_\_\_\_\_

\*The original format of material printed in revised form in the Journal of Home Economics, January 1968.

## REVOLVING CREDIT SYSTEMS\*

## I. FINAL UNPAID BALANCE---use as base for computing service charge

\_\_\_\_\_ Service charge is based on the final unpaid balance at the time of billing.

## II. OPENING BALANCE--use as base for computing service charge

\_\_\_\_\_ A. No option

Service charge is added:

\_\_\_\_\_ 1. At the beginning of the month.

\_\_\_\_\_ 2. At the end of the month.

\_\_\_\_\_ B. Option to avoid service charge by making PAYMENTS in amounts equal to or greater than opening balance

No service charge is made if opening balance is paid in full by: \_\_\_\_\_ 10 days, \_\_\_\_\_ 15 days, \_\_\_\_\_ 20 days, \_\_\_\_\_ 29 days from billing date.

\_\_\_\_\_ C. Option to avoid service charge by making PAYMENTS and RETURNS equal to or greater than opening balance

No service charge if both payments and returns exceed the opening balance and are credited before: \_\_\_\_\_ 10 days, \_\_\_\_\_ 15 days, \_\_\_\_\_ 20 days, \_\_\_\_\_ 29 days from the billing date.

## III. ADJUSTED BALANCE--use as base for computing service charge

\_\_\_\_\_ A. Service charge is based on the month's opening balance reduced by whatever payments are made during the month.

\_\_\_\_\_ B. Same as IIIA with the value of returned purchases included.

## IV. OTHER BALANCE--Use as base for computing service charge

\_\_\_\_\_ Other system. Explain: \_\_\_\_\_

---

\*The original format of material printed in the Journal of Home Economics, January 1968.

Sears, Roebuck and Co.  
Credit Department  
3625 Truman Road  
Kansas City, Missouri 64141

S A M P L E

September 13, 1968

Dear Sir:

I am interested in how stores communicate with customers about revolving credit. Recently I contacted credit managers in several Sears stores for information they routinely give customers applying for revolving credit. They gave me several pamphlets and were most helpful in telling me about how to obtain credit at Sears.

They told me that the actual billing is performed by the regional office, and that I should write you for assistance in figuring revolving credit charges. Because there are so many variations among stores, I have chosen a specific revolving credit example to serve as a basis for our communication. This six-month revolving credit sequence is enclosed. Will you assist me by working it out?

Please note that the billing cycle begins on the 10th of each month. The actual amount of the June 10 payment (shown as "\$60.00+") depends on the accumulated amount of service charges. It will be equal to the June 10 opening balance, and will pay off the account in full. If insurance is required or customary, please itemize it separately in the service charge column.

Enclosed is a self-addressed, stamped envelope for your use. I shall appreciate hearing from you at your earliest convenience.

Thank you very much for your help.

Sincerely yours,

Marilyn J. Max (Mrs.)  
Graduate student

researcher according to the method used by one of the retail stores of that chain. The central office was asked to make any changes needed to correct the example. The letter stated that if no reply were received, the example would be assumed to be calculated correctly according to the system used by that chain.

#### Consumer interpretation of store literature

The researcher assumed the role of the conscientious, literate, and prudent consumer. She read and studied all the written information provided by each store. She used the information to calculate the dollar cost of the revolving credit sequence and to identify the basic system used by each store.

### RESULTS

There were 57 stores selected for interviewing following the procedures previously outlined. Six of these stores proved to be ineligible, because they did not use a centralized method of billing. The results, therefore, are from 51 outlets representing 11 different chains.

Ten of the outlets were in small-size cities (5,000-24,999 in population). Twelve were in medium-size cities (25,000-49,999) and 29 were in large-size cities (50,000 and over).

Most of the creditors were friendly, courteous, and cooperative. In general, they tried to give assistance in working out the revolving credit sequence example. However, 8 were unable to assist and 3 refused. Of the 8 unable to assist, 7 were unfamiliar with the billing procedure because it was done at a central credit office, and 1 was unable to understand the form since it differed from the one used by that store. One of the 3 refusals came from a catalog store which allegedly had a directive from the central office that employees should refer inquiries to the catalog for explanation

of the service charge rates and should not enlarge on this information. Other stores of this chain, however, did cooperate. Another store based its refusal on grounds that only the public relations department was authorized to tell about the credit system used, but again, other stores of this chain cooperated. The credit manager of the third store, located in Manhattan, had grown weary of participating in such problems.

Thus, of the 51 creditors interviewed, 40 (78 per cent) cooperated in calculating the dollar cost of the revolving credit sequence example. One of the creditors who refused and one who was unable to calculate the dollar cost did cooperate in deciding on the system used. Thus, 42 (82 per cent) of the 51 creditors cooperated in identifying the system used.

#### Dollar Costs

The dollar cost figures of the 51 creditors from 11 different chains are shown in Table 1. They range from \$2.28 to \$5.86. Since each store applied the same rate of  $1\frac{1}{2}$  per cent per month to the same billing sequence, there remain only 2 sources of variations: (1) differences between credit personnel of store outlets of the same chain, and (2) differences between chains in systems used for figuring charges.

#### Consistency among retail store credit personnel

The dollar cost figures for the store outlets of no chain were consistent. In only 4 of the 11 chains did at least 2 stores agree. Among the 8 outlets of chain VII, costs varied as much as from \$2.28 to \$5.11, with 2 stores in agreement at \$2.28, 2 at \$5.11, and the other 4 between these figures. This chain either did not have a uniform system for figuring finance charges, which is quite unlikely, or the system was not fully understood by the credit personnel of its store outlets. Two of the 6 stores of chain VIII



agreed on \$4.15 for the dollar cost, and 2 others agreed on a \$5.11 figure. Four of the 8 outlets of chain X were in agreement as to the dollar cost of \$4.15, while the cost of the other 4 was \$4.46. All but 1 of the 4 stores in chain XI figured the cost to be \$5.11. Among the stores of the other 7 of the 11 chains, there was no agreement between as many as two stores.

These results indicate that there is so great an inconsistency between outlets of the same chain that it would be impossible to infer the policy of the chain in regard to its system for figuring finance charges, assuming that the chain did have a uniform policy. This assumption is reasonable, since the chains that distributed literature distributed the same literature to each of their store outlets.

#### Consistency between central offices and retail outlets

A more reliable source of information, presumably, would be the central office, from which store policy emanates and where more sophisticated personnel are employed. The dollar costs calculated by central office personnel are shown in Table 1 for all but chains II and IV, which did not cooperate initially and failed to respond when supplied figures obtained from one of their retail outlets.

The record of agreement between central office calculations and retail outlets is very poor. For example, of the 40 stores assisting with calculations, only 2 stores figured service charges equal to those calculated by central offices. This is only 5 per cent of the store outlets. The other 95 per cent of the store outlets were not in agreement with their central credit offices.

Figures in Table 1 indicate that if a customer were to ask retail store credit personnel in several stores of the same chain to assist in working out the dollar cost of his revolving credit charge account, and even if a majority

Table 1. Dollar costs of the standard six month revolving credit sequence,\* calculated by

Credit personnel of store outlets in															
Chain	Small size cities 5,000-24,999				Medium size cities 25,000-49,999				Large size cities 50,000 and over					Central credit office	Conscien- tious consumer
	A	B	C	D	E	F	G	H	I	J	K	L	M		
I	R	.	.	.	4.36	.	.	.	.	.	.	5.86	.	4.89	4.15
II	.	.	.	.	.	.	.	.	.	.	2.54	4.46	4.15	R	4.46
III	.	.	.	.	.	.	.	.	.	.	{ 5.11 4.46	.	U	4.15	5.11
IV	U	.	.	.	.	U	.	.	.	U	.	.	.	2.56	2.28
V	.	.	.	.	.	.	.	.	.	{ 2.47 5.11	.	2.28	.	2.86	2.28
VI	.	.	.	.	.	.	.	.	4.15	2.43	.	.	4.46	R	4.15
VII	4.46	U	2.76	.	2.28	.	2.90	3.68	5.11	5.11	2.28	.	.	{ 2.43 2.28	3.68
VIII	.	5.11	5.12	.	R	R	.	5.11	4.15	2.43	.	{ U 4.15	.	2.74	4.15
IX	.	.	.	U	U	.	2.81	.	.	.	.	.	.	4.15	4.47
X	4.15	.	4.46	.	.	.	4.15	4.15	4.46	4.15	.	{ 4.46 4.46	.	4.14	4.46
XI	.	.	.	.	.	.	.	.	.	5.11	3.68	{ 5.11 5.11	.	4.46	4.15

\*See revolving credit sequence, p. 17.

R = Refused      U = Unable to calculate the dollar cost

. = No store outlet included in sample

of them agreed on one figure, the central credit office still would likely send a bill for a different amount. For example, in chain XI, 3 of the 4 retail chain stores calculated a dollar cost of \$5.11 on the revolving credit sequence. However, the central credit office calculated \$4.46 in service charges.

#### Consistency between creditors and a consumer

To determine how profitable it would be for a consumer to study all the literature so as to become an informed shopper, the researcher read all the literature supplied by each chain. Then, using this information, she calculated the cost of the billing system. These figures are shown in Table 1 under the heading "Conscientious consumer." In the above example of chain XI, in which 3 of the 4 stores calculated the cost to be \$5.11 and the central office obtained \$4.46, the conscientious consumer calculated the charges to be \$4.15. This was typical for all of the chains; in no instance did the consumer agree with the central office. For the 9 cooperating chains, 4 of the consumer's figures were less than and 5 were more than the amounts figured by the central office. Thus there was no apparent bias. Similarly, there appears to be a pattern of random error rather than an intentional bias on the part of store creditors. The consumer's calculations agreed with only 11 of the 40 calculations made by store outlets. In the other 29 cases, 14 of the consumer calculations were less than and 15 were more than the dollar cost calculated by credit personnel.

#### Systems Used

The systems identified by credit personnel of the 42 stores are coded and described in Table 2. The balances upon which service charges are computed are included in the descriptions. Table 2 includes all the systems

Table 2. Revolving credit systems\*

Code	Description
I	FINAL UNPAID BALANCE--use as base for computing service charge. Service charge is based on the final unpaid balance at the time of billing.
	OPENING BALANCE--use as base for computing service charge
IIA1	No option; service charge is added: At the beginning of the month.
IIA2	At the end of the month.
	Option to avoid service charge by making PAYMENTS in amounts equal to or greater than opening balance; no service charge is made if opening balance is paid in full within the following number of days from billing date:
IIB1	0-23 days
IIB2	24-31 days
	Options to avoid service charge by making PAYMENTS and RETURNS equal to or greater than opening balance; no service charge is made if both payments and returns exceed the opening balance and are credited before the following number of days from the billing date:
IIC1	0-19 days
IIC2	20-23 days
IIC3	24-31 days
IIIA	ADJUSTED BALANCE--use as base for computing service charge. Service charge is based on the month's opening balance reduced by whatever payments are made during the month.
IIIB	Same as IIIA with the value of <u>returned</u> purchases included.
	OTHER BALANCE OR SYSTEM
IVA	Same as system I above, but option to avoid service charge by making payments and credits which exceed the unpaid balance within 30 days of billing date.
	Same as one of systems above, but with a minimum service charge:
IVB1a	25¢ minimum service charge on system IIIA
IVB1b	25¢ minimum service charge on system IIIB
IVB2	50¢ minimum service charge on system IIA2
	70¢ minimum service charge on:
IVB3a	System IIB2
IVB3b	The opening balance, but with an option to avoid service charge by making payments and returns that exceed the unpaid balance within 30 days of billing date.
IVC	Balance on "calendar day #1" of each month--use as base for computing service charge.

\*See Table 4 for the dollar cost of each system.

originally proposed as well as those added to accommodate different creditors. The systems used by retail store creditors and central credit office personnel, and the systems described in printed literature as interpreted by the conscientious consumer are tabulated in Table 3. In Table 4, the systems are listed along with the dollar costs as calculated by the researcher and as calculated by each retail store creditor and central credit office identified with each system.

#### Consistency of responses among retail store credit personnel

The systems identified by the credit personnel of the 42 stores are shown in Table 3. None of the stores in chains I, II, III, IV, or IX agreed on the credit system used. At least 2 stores in the other 6 chains agreed, but in no chain was there complete agreement. In chain V, 2 of the 3 stores said they used system I. In chain VI, 2 of the 3 stores claimed to use system IIB. In chain VII, 3 of the 9 stores reported using system IIB; however, 2 others reported using system I. Two of the 9 stores in chain VIII affirmed the use of system IIB2, but each of the other 7 stores allegedly used a different system or refused to disclose the system used. There was more agreement among creditors of the 8 retail stores of chain X: 5 used system IIB2, while the other 3 agreed that IIA2 was the system used. Most of the retail stores of this chain did the billing locally. Of the 4 stores in chain XI, 3 claimed to use system I. Systems I and IIB2 account for about half of the identified systems, with another fourth of the stores identifying with systems IIB and IIA2.

#### Consistency between central offices and retail outlets

After studying the cost data returned by central credit offices and noting their methods of calculation, the researcher deduced which system had been used. These systems are tabulated under the "central credit office"

Table 3. Systems used for calculating revolving credit\*

By credit personnel of store outlets in																
Chain	Small size cities 5,000-24,999				Medium size cities 25,000-49,999				Large size cities 50,000 and over						By the central credit office consumer	By the conscien- tious consumer
	A	B	C	D	E	F	G	H	I	J	K	L	M			
I	R	.	.	.	IIB2	.	.	.	.	.	.	I	IVB3b	IVB3a		
II	.	.	.	.	.	.	.	.	.	.	IVB1a	IIB1	R	IIB1		
III	.	.	.	.	.	.	.	.	.	.	{ I IIA1	.	IIB2	I		
IV	U	.	.	.	.	U	.	.	.	U	.	.	IVB1a	IVB1b		
V	.	.	.	.	.	.	.	.	.	{ I I	.	IIB	IIIA	IIIB		
VI	.	.	.	.	.	.	.	.	IIB2	IIB2	.	.	R	IIB2		
VII	IIA2	U	IIIB	.	IIIB	.	IIIA	IVA	I	I	IIIB	.	{ IIIA IIIB	IVA		
VIII	.	I	IVC	.	IIA2	R	.	IIB2	IIC3	IIIB	.	{ U IIB2	IIC3	IIB2		
IX	.	.	.	U	U	.	IIIB	.	.	.	.	.	IIB2	IVB2		
X	IIB2	.	IIA2	.	.	.	IIB2	IIB2	IIA2	IIB2	.	{ IIB2 IIA2	IIB2	IIA2		
XI	.	.	.	.	.	.	.	.	.	I	IVA	{ I I	IIA2	IVB3a		

\*See Table 2 for coded systems.

R = Refused

U = Unable to calculate the dollar cost

. = No store outlet included in sample

Table 4. Dollar cost of revolving credit classified by systems, as identified by stores and central offices\*

System		Retail store creditors										Central credit offices	
Code	Cost												
I	5.11	2.47	5.11	5.11	5.11	5.11	5.11	5.11	5.11	5.11	5.86	.	.
IIA1	5.43	4.46										.	.
IIA2	4.46	4.46	4.46	4.46	4.46	4.46	4.46	R				4.46	
IIB1	4.46	4.46											
IIB2	4.15	2.43	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.36	4.46	5.11	
IIC1	4.46	.										4.14	4.15 4.15
IIC2	3.05	.										.	.
IIC3	2.74	4.15	4.15	U								2.74	
IIIA	2.43	2.90										2.43	2.86
IIIB	2.28	2.28	2.28	2.28	2.43	2.76	2.81					2.28	
IVA	3.68	3.68	3.68									.	
IVB1a	2.55	2.54										2.56	
IVB1b	2.28	.										.	
IVB2	4.69	.										.	
IVB3a	4.15	.										.	
IVB3b	4.89	.										4.89	
IVC	5.44	5.12										.	

\*See Table 2 for coded systems.

R = Refused

U = Unable to calculate the dollar cost

. = No creditor identified with system

column in Table 3.

None of the central offices used system I, which was one of the systems most frequently identified by retail outlets. Of the 15 creditors responding from the 7 smaller chains within which only 3 stores were interviewed, none agreed with the central office system. Of the 27 retail store creditors responding from the other 4 chains, 10 agreed with the central office. However, 5 of these 10 creditors were from chain X, which generally did its billing locally. Most of the other stores sent all credit computations to a computer at the central office. Over-all, only 10 of the 42 stores claimed to use the same system that the central credit office apparently had used.

#### Consistency between creditors and a consumer

The researcher assumed the role of the conscientious consumer who read carefully the literature supplied by the store to identify its method. In no case did the conscientious consumer agree with the system attributed to the central office of the 9 cooperating chains. The systems that the consumer concluded were being used by chain stores were consistent with those the credit personnel in chain stores claimed to use in only 12 of the 42 stores.

#### Dollar cost and system identification

The dollar costs obtained when using various credit systems are shown in Table 4. Of the 10 retail store creditors who identified with system I, 8 obtained a \$5.11 dollar cost. This would be the true cost of that system, yet no central office recognized system I. Five of the 6 stores identifying with system IIA2 calculated a \$4.46 dollar cost, its true cost, yet only one central office claimed this system. Of the 10 stores that said they used system IIB2, 6 calculated correctly the dollar cost to be \$4.15, as did the central offices. Half the 6 stores claiming to use system IIIB calculated correctly a \$2.28 dollar cost, the same cost calculated by the central office.



## DISCUSSION

The consistency of the figures obtained from the store credit personnel and those computed for each system may be greater than might be expected under other circumstances because of the procedure used. As previously described, the procedure was for the researcher to select the description which seemed to describe best the one the creditor had used to calculate the service charge. The researcher then asked the creditor if that system did describe the system used by that chain store. If it did not, he was asked to select another description or to adjust the description until it described accurately the system used by that store. The line of least effort was for the creditor to concur with the judgment of the researcher. Also, the researcher studied the calculations returned by central credit offices and concluded which system had been used in making the calculation. Again, the researcher became involved in the decision. Under the circumstances, it is surprising there is not greater agreement and consistency between the researcher and the store and central offices.

## Reliability of Central Credit Office Figures

It would seem reasonable to assume that the central credit office of a chain would be adequately staffed to give reliable information. However, three experiences suggest that information obtainable from a central credit office may not be accurate.

The central office of a retail outlet included in the preliminary study returned the revolving credit sequence example completed using a method contrary to the system described in their contract. This inconsistency was brought to their attention, and they immediately revised their calculations to conform to the method described in their contract.

The assistant general credit manager of another central credit office telephoned the researcher to ask if the example would be used for any kind of government report. On being assured the report would be held in confidence, he asked more specifically about the problem that he evidently had worked, but not to his satisfaction. As he discussed it over the telephone, he discovered a mathematical error in his work; he had added service charges for two of the different months for which none should have been assessed. He asked to be sent another form for reworking. A second copy was sent immediately and two weeks later it was returned completed. It reflected his lack of self-confidence in figuring finance charges. There were 16 figures crossed out and refigured. The system he used was different from the system he had indicated over the telephone as in use by his chain and as described in the contract. A service charge had been assessed on a middle-of-the-month balance during a month for which he had indicated previously no charge would be made. Charges for the last three months totaled 9¢ higher than would have resulted from multiplying by 1.5 per cent, because he had used one of the charts used until a few months prior to that time. He enclosed a copy of the chart, saying he chose to use it rather than the new computer which would have computed an exact 1.5 per cent service charge. For a \$50 balance, the chart showed a charge of 79¢ instead of a 75¢ (1.5 per cent) service charge. The rate came to be as high as 2.2 per cent per month (26.4 per cent per year) on a \$5 balance when the chart was used. If a customer consistently had a balance at the lower end of each bracketed amount on the chart, he would be charged a rate substantially higher than the contract rate of 1.5 per cent per month.

A different experience was encountered with a third chain. The revolving credit sequence example was sent to two central credit offices

of chain VII ("A" and "B") in different cities. Credit office VII "A" returned the completed example with a detailed explanation of the system used. The explanation and calculations appeared to be correct. Three weeks after a letter was sent to central office VII "B" in a midwestern state, the completed revolving credit sequence example was returned in an envelope postmarked "New York, New York." Even though credit offices "A" and "B" used identical credit agreements, office "A" had subtracted the value of return items before calculating the service charges, while office "B" calculated the service charges without subtracting returns. The two central offices of chain VII reported different total service charges and showed different systems used in figuring the same example.

Inconsistencies were so prevalent at all levels that reliable information or accurate answers to credit problems could not be expected. Since many of these chains are national chains, the conditions revealed by the study are not limited to Kansas, and may be symptomatic of general conditions throughout the United States.

#### Confidence of Creditors Compared with Accuracy of Figures

Twenty-four of the 51 creditors appeared to be confident of their understanding of credit, while others were noticeably hesitant and expressed lack of knowledge of the system. However, there seemed to be no correlation between confidence of the creditors and accuracy of the calculations. For example, credit personnel in 3 outlets of chain VII using the same system seemed confident that the information they supplied was correct. Yet each used a different method for calculating the revolving credit sequence, and each figured a different service charge. In another chain, chain X, credit personnel of three different store outlets all used the same system and

each seemed confident of the cost figures. However, the contract and central credit office both described a system different from the one they had used.

One creditor who was extremely confident of her understanding of the credit system visited with the interviewer for about 25 minutes, telling of the week of training she had received at the central credit office. She asked if the interviewer knew the difference between the "unpaid balance" and the "balance brought forward," and said it had taken her three years to learn the difference. She explained that the service charge was based upon the final unpaid balance. However, the central office of that chain had previously explained that all payments and returns are subtracted from the opening balance, and the service charge is computed on the remaining adjusted balance.

Only 8 of the 24 creditors who seemed confident of their knowledge quoted service charges equal to those computed by central offices or implied by the contract. Seven of these 8 were creditors in outlets of the same chain in which billing was usually performed in the local outlets.

Six of the creditors who seemed unsure of their knowledge of their credit system calculated service charges equal to those calculated by the central credit office or consistent with the system implied by the contract.

Other creditors who appeared to be confident of their understanding of the credit system hesitated to disclose the information. A conjecture is that retail store management may intentionally fail to inform employees so that they will not try to disclose more information than is printed in the hand-out literature, or so that they will not become confused and give customers inaccurate information.

Accuracy is difficult, if not impossible, to determine from such conflicting information and data. Any or all of the following could have

been accurate: the credit contract, the central credit office, the creditor of any one of the store outlets, or the researcher. If all had been consistent in their cost figures or system identification, such a consistent response would be indicative of an accurate finding. This was never the case. Consequently, the question of whose figures or interpretation of systems were accurate remains unanswered.

One word that does describe the situation is "confusion." Confusion exists not only between retailer and consumer, but also between retail outlets and their central offices. It is to be expected that the consumer, under these circumstances, would be confused.

#### CONCLUSIONS

The following conclusions may be drawn:

1. Retail store credit personnel of the same chain cannot be relied upon to identify the credit system of their store or the dollar cost for a given set of billing statements.
2. The central credit office personnel of every chain operated under a different interpretation of the chain's system from that used by the retail store credit personnel of its outlets.
3. Careful study of the printed literature supplied by a retail store would not enable a consumer to know the system used by a retail store or its central office. Furthermore, it would not enable a consumer to determine whether one system would be more advantageous than another for the style of credit usage of that family.
4. Chain store personnel at the local level or central office level proved to be unreliable sources of information, and the consumer who attempts to fill the void with diligent study of available

- literature and advertising would not achieve satisfactory relief from the confusion.
5. In the absence of an explicit standard for disclosing credit information, no one of the three interpretations can be judged more accurate than another. Individually, each could be and may be considered accurate by the source; it is only as the information is compared that errors become apparent.
  6. The technique of standardizing credit sequences for use in comparative testing of answers was effective.

#### RECOMMENDATIONS

The passage of the Truth in Lending Act should bring about conditions under which there prevails a disclosure of meaningful credit terms. Consumers and creditors will be supplied all the information needed for accurate calculation of finance charges and identification of systems. Furthermore, the legislation prescribes a standard of accuracy for all.

The researcher recommends that follow-up studies be made periodically after the enactment of Truth in Lending to show how successfully Truth in Lending legislation accomplishes its purpose of requiring the disclosure of meaningful credit terms. By comparing the confusion evidenced by this research with conditions which prevail after Truth in Lending, the success of the legislation can be evaluated. Success can be measured by the reduction of inconsistencies among retail outlets of a chain and between stores and their central office, and with the interpretation made by an educated and conscientious consumer.

## ACKNOWLEDGMENTS

The author wishes to express her gratitude to the people who provided encouragement and stimulus during the course of this investigation. The advice and ideas of Dr. Richard L. D. Morse throughout this study are appreciated greatly.

Gratitude is expressed to Miss Tessie Agan and Dr. Ruth Hoeflin for their constructive criticism and reading of the manuscript.

A special note of thanks goes to the author's husband George for his assistance driving to cities for interviews and for his encouragement throughout the study.

The author appreciates greatly a graduate fellowship provided by General Foods Corporation, a scholarship given by the Kansas Association of Finance Companies, and costs of research partially provided by the Kansas Agriculture Experiment Station under project number 637.

## LITERATURE CITED

- BAIR, Joseph W., Secretary, U. S. Treasury Department. Statement before a subcommittee of the Committee on Banking and Currency, U. S. Senate. Hearings on S. 5, 90th Cong., 1st sess., 1967, pp. 74-86.
- Board of Governors of the Federal Reserve System. Federal Reserve Bulletin, 54 (December 1968), pp. 983-1003; A52-A55.
- Changing Times. "What It Costs To Say Charge It." 19 (June 1965), 17-19.
- Cohen, Jerome B., and Hanson, Arthur W. Personal Finance. Homewood, Illinois: Richard D. Irwin, Inc., pp. 110-111.
- Consumer Advisory Council. First Report. Executive Office of the President, U. S. Government Printing Office, Washington, D. C., October 1963, pp. 13; 62-64.
- Kansas City Star. "Department Stores Pick Up Tab for Credit Customers," New York (AP), January 10, 1969, p. 18.
- Keeney, Eugene A. Statement before a subcommittee of the Committee on Banking and Currency, House of Representatives, Hearings on H. R. 11601, Consumer Credit Protection Act, 90th Cong., 1st sess., 1967, p. 523.
- Morse, Richard L. D. "Consumer Credit." Journal of Home Economics, 49 (April 1957), 273.
- \_\_\_\_\_. Statement before a subcommittee of the Committee on Banking and Currency, U. S. Senate, Hearings on S. 2755, Consumer Credit Labeling Bill, 86th Cong., 2nd sess., 1960, p. 634.
- \_\_\_\_\_. Truth in Lending. Pamphlet Number 17, Council on Consumer Information, Columbia, Missouri, 1966.
- \_\_\_\_\_. "Historical Development of Consumer Credit." Proceedings of a National Workshop sponsored by the American Home Economics Association, Consumer Credit in Family Financial Management, U. of Wisconsin, Madison, Wisc., October 1967a, pp. 20-26; 167-172.
- \_\_\_\_\_. Statement before a subcommittee of the Committee on Banking and Currency, U. S. Senate, Hearings on S. 5, Truth in Lending, 90th Cong., 1st sess., April 20, 1967b, pp. 6-7. (Mimeographed; available at Dept. of Family Economics, K.S.U., Manhattan, Kansas.)
- \_\_\_\_\_. Memorandum to McLean from Morse. Hearings before a subcommittee of the Committee on Banking and Currency, House of Representatives, Hearings on H. R. 11601, Consumer Credit Protection Act, 90th Cong., 1st sess., August 1967c, pp. 1060-1061.



- \_\_\_\_\_. "A Workbook on Consumer Credit." Journal of Home Economics, 60 (January 1968), 47-52.
- Morse, Richard L. D., and Theresa Courter. "Are Credit Terms Quoted Accurately?" Consumer Finance News, 48 (October 1963), 3.
- \_\_\_\_\_. "Are Credit Terms Quoted Accurately?" Credit Union Executive, 2 (Winter 1963), 20-29.
- \_\_\_\_\_. "Are Credit Terms Quoted Accurately?" Personal Finance Law Quarterly Report, 17 (Fall 1963), 119.
- Neifeld, M. R. Neifeld's Guide to Instalment Computations. Easton, Pa.: Mack Publishing Company, 1953, p. xxi.
- Redeker, Norma J. "Credit Quotation Accuracy." Unpublished Masters Thesis, Kansas State University, 1964.
- Sullivan, Leonor K. Hearings before a subcommittee of the Committee on Banking and Currency, House of Representatives, Hearings on H. R. 11601, Consumer Credit Protection Act, 90th Cong., 1st sess., 1967, p. 523.
- U. S. Congress. An Act To Safeguard the Consumer in Connection with the Utilization of Credit. Pub. L. 90-321, 90th Cong., 2nd sess., S. 5, May 29, 1968, p. 2.
- \_\_\_\_\_. House. H. R. 11601, 90th Cong., 2nd sess., January 30, 1968. Congressional Record, 114, No. 12, p. H517.
- \_\_\_\_\_. House. H. R. 11601, 90th Cong., 2nd sess., January 31, 1968. Congressional Record, 114, No. 13, p. H613.
- \_\_\_\_\_. Senate. Committee on Banking and Currency. Revolving Credit Provisions of Truth in Lending. Hearings before the Committee on Banking and Currency, U. S. Senate on S. 5, 90th Cong., 1st sess., 1967.
- \_\_\_\_\_. Senate. Subcommittee of the Committee on Banking and Currency. Hearings on S. 1740, Truth in Lending Bill. 87th Cong., 1st sess., 1961.
- \_\_\_\_\_. Senate. Subcommittee of the Committee on Banking and Currency. Hearings on S. 1740, Truth in Lending Bill. 87th Cong., 2nd sess., 1962.
- \_\_\_\_\_. Senate. Subcommittee of the Committee on Banking and Currency. Hearings on S. 750, Truth in Lending Bill, Part 2, 88th Cong., 1st and 2nd sess., 1963-1964.
- U. S. Department of Commerce. Bureau of the Census. 1963 Census of Manufacturers. Tables 17-1 and 17-2.

## APPENDIX

U. S. Department of Defense. Department of Defense Directive Number 1344.7,  
"Personal Commercial Affairs," May 2, 1966.

Vancil, Richard F. Hearings before a subcommittee of the Committee on  
Banking and Currency, U. S. Senate, Hearings on S. 750, Truth in Lending  
Bill, 88th Cong., 1st and 2nd sess., 1964, pp. 1100-1110.

\_\_\_\_\_. Hearings before a subcommittee of the Committee on  
Banking and Currency, U. S. Senate, Hearings on S. 5, Truth in Lending  
Bill, 90th Cong., 1st sess., 1967, pp. 486-488.

## APPENDIX A

RETROVING CREDIT ACCOUNT METHODS  
 $1\frac{1}{2}\%$  per month ( $18\%$  per year) applied  
 to a standardized six-month account

Method	:	Previous:	Credits	:	Balance before	Service:	Closing
:	Month:	balance :	Payments :	Returns :	Charges :	service charge :	charge : balance
:	(a) :	(b) :	(c) :	(d) :	(e) :	(f) = b-c-d+e :	(g) : (h) = f+g
<b>Method I:</b>							
No option.	Jan.	-----	-----	\$10.00	\$30.00		
Service charge, $1\frac{1}{2}\%$ of	Feb.	\$20.30	\$20.00	30.00	120.00	\$20.00	\$0.30
current balance at end	Mar.	91.65	80.00	40.00	90.00	90.30	1.35
of month.	Apr.	62.58	10.00	-----	10.00	61.65	.93
(c) = $1\frac{1}{2}\%$ (f)	May	63.52	10.00	-----	10.00	62.58	.94
	June	64.47	10.00	-----	10.00	63.52	.95
						64.47	.97
						Total =	\$5.44
<b>Method II:</b>							
30-day option.	Jan.	-----	-----	10.00	30.00	20.00	-----
Service charge, $1\frac{1}{2}\%$ of	Feb.	20.00	20.00	30.00	120.00	90.00	-----
previous month's ending	Mar.	90.00	80.00	40.00	90.00	60.00	-----
balance less payments	Apr.	60.00	10.00	-----	10.00	60.00	-----
and returns.	May	60.75	10.00	-----	10.00	60.75	.75
(c) = $1\frac{1}{2}\%$ (b-c-d) if	June	61.51	10.00	-----	10.00	60.75	.76
(b) > (e+d)						61.51	.77
						Total =	\$2.28
<b>Method III:</b>							
No option.	Jan.	-----	-----	10.00	30.00	20.00	-----
Service charge, $1\frac{1}{2}\%$ of	Feb.	20.00	20.00	30.00	120.00	90.00	.30
previous month's ending	Mar.	90.30	80.00	40.00	90.00	60.30	1.35
balance.	Apr.	61.65	10.00	-----	10.00	61.65	.93
(c) = $1\frac{1}{2}\%$ (b)	May	62.58	10.00	-----	10.00	62.58	.94
	June	63.52	10.00	-----	10.00	63.52	.95
						Total =	\$5.47
<b>Method IV:</b>							
30-day option.	Jan.	-----	-----	\$10.00	\$30.00	\$20.00	-----
Service charge, $1\frac{1}{2}\%$ of	Feb.	\$20.00	\$20.00	30.00	120.00	90.00	-----
previous month's ending	Mar.	90.00	80.00	40.00	90.00	60.00	-----
balance.	Apr.	60.00	10.00	-----	10.00	60.00	-----
(c) = $1\frac{1}{2}\%$ (b) If b>(e+d)	May	60.90	10.00	-----	10.00	60.90	\$0.90
	June	61.81	10.00	-----	10.00	60.90	.91
						61.81	.93
						Total =	\$2.74
<b>Method V:</b>							
30-day option.	Jan.	-----	-----	10.00	30.00	20.00	-----
Service charge, $1\frac{1}{2}\%$ of	Feb.	20.00	20.00	30.00	120.00	90.00	-----
previous month's ending	Mar.	90.00	80.00	40.00	90.00	60.00	1.35
balance unless paid in	Apr.	61.35	10.00	-----	10.00	61.35	.92
full. ("all or none")	May	62.27	10.00	-----	10.00	62.27	.92
(c) = $1\frac{1}{2}\%$ (e) if (b)>(c)	June	63.21	10.00	-----	10.00	63.21	.95
						Total =	\$4.16
<b>Method VI:</b>							
30-day option.	Jan.	-----	-----	10.00	30.00	20.00	-----
Service charge, $1\frac{1}{2}\%$ of	Feb.	20.00	20.00	30.00	120.00	90.00	-----
previous month's ending	Mar.	90.00	80.00	40.00	90.00	60.00	.15
balance less payments	Apr.	60.15	10.00	-----	10.00	60.15	.75
(but not returns).	May	60.90	10.00	-----	10.00	60.90	.76
(c) = $1\frac{1}{2}\%$ (b-c) if (b)>(c)	June	61.66	10.00	-----	10.00	61.66	.77
						Total =	\$2.83

Source: Richard L. D. Morse, Truth in Lending, Pamphlet Number 17  
 (Columbia, Missouri: Council on Consumer Information, 1966), pp. 26-27.

REVOLVING CREDIT SYSTEMS  
PRIOR TO THE TRUTH IN LENDING ACT

by

Marilyn Janet Morris Max  
B. S., Iowa State University, 1967

---

AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Family Economics

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1969

The rapid expansion of consumer credit during the Twentieth Century brought about increased concern for the adequacy of consumer credit information. Legislation to require standardized disclosure of credit terms was proposed beginning in 1960. The Consumer Credit Protection Act, Title I of which may be cited as the Truth in Lending Act, became effective July 1, 1969. The purpose of the Act is to assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him and avoid the uninformed use of credit.

The objective of the study was to investigate prior to the Truth in Lending Act the reliability of revolving credit information obtainable from retailers. The study was made by obtaining dollar cost calculations from creditors for a standardized billing sequence and identifying retail revolving credit systems used by retail store credit personnel of various chains, central credit office management of chain stores, and store literature as interpreted by a conscientious consumer.

Creditors from 51 retail stores representing 11 different chains in Kansas were interviewed and asked to provide samples of revolving credit literature they routinely supply consumers, to calculate the dollar cost of a standardized six-month revolving credit sequence example, and to select a description of the credit system used by that store. Written requests were directed to central credit offices, asking them to calculate the dollar cost of the six-month revolving credit sequence. The researcher studied all the revolving credit literature to identify the system used by each chain and then calculated the dollar cost of the six-month revolving credit sequence.

This study revealed the following conditions that prevailed before the Truth in Lending Act:

- A consumer could not expect reliable credit information from retail outlets of chain stores. Credit personnel of retail store outlets of the same chain were generally inconsistent in their calculations of the dollar cost of revolving credit and in indicating the system used to calculate the cost;
- A consumer could have become as confused if he had contacted the central credit office for assistance as if he had contacted retail stores. Central credit offices of every chain calculated credit costs differently from those calculated by their retail store outlets.
- A consumer who carefully read and studied all the literature distributed by any of the retail stores would still have been unable to achieve a correct understanding of store credit operations. The printed information would not have enabled a consumer to determine the system a chain used for making calculations, or, for a revolving credit problem, to calculate a dollar cost figure that would agree with the cost as calculated by the central credit office of a chain or its stores.

Follow-up studies are recommended to evaluate the success of the Truth in Lending Act in providing meaningful disclosure of credit terms. Success can be measured by the reduction of inconsistencies among retail outlets of a chain and between stores of a chain and its central office, and by a reduction of differences in interpretations by consumers and retailers of the revolving credit operations of retailers.